CONSOLE CONVERTER For MAC

CV-160

User's Manual

Packing Checklist

Console Converter

x 1

• User's Manual

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Please read this manual thoroughly and follow the instruction procedures to prevent any damage to the CV-160 and/or the connecting devices.

LIMITED WARRANTY

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INTRODUCTION

CV-160 is an IBM peripherals to Macintosh (Mac) Converter which includes the Video, Keyboard and Mouse signal converting. CV-160 allows user to connect a PS/2 Mouse, a PS/2 Keyboard and a PC used Monitor into its input connectors and converting the signals and then generating the Mac-ADB compatible signals to a Mac computer.

Besides a build-in ADB Interface for PS/2 Keyboard and Mouse, CV-160 also reserves an ADB Interface connector for other applications. CV- 160 allows user to hot-plug the PS/2 Keyboard and the PS/2 Mouse at any time to operate the Mac. CV- 160 supports a "Power ON/OFF" key to take place the "Power ON/OFF" key of the Mac Keyboard.



Fig. 1 CV-160connection diagram

APPLICATION

CV-160 is compatible with the interface of CS-104, CS-122, CE-120, CV-130 and so on. Link together with the above devices provides Remote Control capabilities and Console switching functionalities for MAC, PC, and SUN station Systems.



Fig. 2 CE-120 application



Function	Specifications		
Power Consumption	50mA (max.)		
Video In connector	DB-15 x 1 Male		
Video Out Connector	HD-15 x 1, Female		
ADB Interface	Mini DIN 4-pin x 2. Female		
PS/2 Keyboard Connection	Mini DIN 6-pin x 1, Female		
PS/2 Mouse Connector	mini DIN 6-pin x 1, Female		
DIP Switch	8 bits x		
Power ON/OFF	Push Button x		
Status LED	Red LED x		
Operation Temp.	5°C ~40°C		
Stock Temp.	-20°C ~60°C		
Humidity	0% ~80%		
Enclosure	Plastic		
Weight	130g		
Dimensions (LxWxH)	100 x 80x 36 (mm)		

INSTALLATION

1. DEVICE CONNECTION:

- 1) Mac must be powered off before cable connection for safety and peripheral enumeration.
- Connect the CV-160 to a MAC computer, a PS/2 keyboard, a PS/2 Mouse and a PC Monitor, see figure 1.
- 3) Press CV-160 POWER ON/OFF key to turn on the Mac.

Optional Connection:

- **4)** Remote control with CE-120, please refer to the User's Manual of CE- 120, see figure 2.
- 5) Console switch with CS-104, please refer to the User's Manual of CS-104, see figure 3.



(The above device MUSt have the PS/2 function)

Fig. 3 CS-Series application

• Relativity Product List

cs-104	cs-122	cs-122 CS-1016		CS-124
	CS-221	CE-120	cv-130	

For detail information of above products, please contact your local dealer.

2. VIDEO:

CV-160 can be divided into three portions, Video, Keyboard and mouse. VIDEO Modes can be selected by setting a DIP Switch. see Table 1.

DIP Switch Setting									
SW1	SW2	SW3	SW4	SW5	SW6	Model	Horizontal	Vertical	Resolution
							(KHz)	(Hz)	(Dots x lines)
ON						13" Color	1		640 x 480
ON	ON					NISC (Under)			512x384
ON		ON				12" Color	24.4X	60.15	512x384
ON	ON	ON				21" Color	6X.7	75	1152x870
	ON					NTSC (Over)			640 x 480
		ON				21" Mono			1152 x 870
	ON	ON				Portrait			640 x 870
			ON	ON		19" Color	60.2	75	1024 x76X
			ON		ON	16" Color	49.7	75	832 x 624
			ON	ON	ON	PAL	L		_640 x 480
	(*1)			ON	ON	VGA	31.5	60	640x480
				ON	ON	SVGA	35.2	50	800x600
ON	(*2)			ON	ON	VGA	35	67	640x480
ON				ON	ON	SYGA	49	75	832 7.624

Table 1



Never set up DIP switch when Mac is powered.

- **VOTE:** (*1) When SW5=ON and SW6=ON, the VGA and SVGA resolutions are selected in control panel/monitor.
 - (*2) When SW1=ON, SW5=ON and SW6=ON, the VGA and SVGA resolutions are selected in control panel/monitor.

3. KEYBOARD:

The keyboard settings are listed in Table 2.

The keyboard mapping from Mac keyboard to either PS/2 101 key or PS/2 104 key are listed in Table 4.

Figure 4 to figure 6 are the keyboard layouts for Mac, PS/2 104 key and PS/2 101 key respectively.

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ON	PS/2 101 KEY
OFF	PS/2 104 KEY



4. Mouse:

The Mouse speed settings are listed in Table 3.

ON	Mouse Hi Speed	
OFF	Mouse Normal Speed	
OFF	Mouse Normal Speed	

Table 3



Fig. 6 PS/2 101 Key keyboard maps to Mac's keyboard

Mac keyboard emulated by PS/2 keyboard

MAC	101 key	104 key	
Shift	L or R_Shift	L or R_Shift	
ctrl	L_Ctrl	L or R_Ctrl	
option	R_Ctrl	L or R_WIN	
ж	L_R_Alt	L or R_Alt	
F13	Prt_Sc Prt_S		
F14	Scroll Lock	Scroll Lock	
F15	L or R-Shift & Pause	L or R-Shift & Pause	
=	Pause	Pause	
Power ON/OFF	CV160 Power key	CV160 Power key	
Return	Enter	Enter	
Delete	Back Space	Back Space	
he/p	Ins	Ins	

PREVENTING RADIO & TV INTERFERENCE

WARNING!!! This equipment has been tested and found to comply with limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reoriented or relocated the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for he/p.